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Civil & Traffic Engineers • Surveyors • Planners • Landscape Architects

F. A. Hesketh & Associates, Inc.

March 7, 2022

Mr. Alan Bongiovanni The Bongiovanni Group, Inc. 170 Pane Road Newington, CT 06111

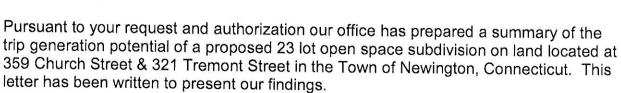
Re: Traffic Impact Report

Proposed Rock Hole Brook Subdivision

Rock Hole Lane - Newington, CT

Our File: 22027

Dear Mr. Bongiovanni:



The property is currently undeveloped and is owned by AA Denorfia Building & Development, LLC. The property Is located in the R-20 zone. The current application is for a Special Permit for an Open Space Subdivision, under Section 6.8, and a Special Permit for an Interior Lot, under Section 3.4.9 of the Newington Zoning Regulations. The proposed subdivision will have a total of 23 lots. 22 lots are proposed on a new Town roadway that is the extension of Rock Hole Lane to Winslow Drive. One lot will front and have access to Church Street.

In order to estimate the trip generation of the existing and proposed zones, we referenced the ITE *Trip Generation* report, 11th Edition. Included in the ITE *Trip Generation* is Land Use Code 210 – Single Family Detached Housing. The ITE data indicates that a single family detached housing unit has an average daily trip generation of 9.43 trips per unit, and average morning and afternoon peak hour generation rates of 0.70 and 0.94 trips per unit, respectively. Therefore a 23 unit development has an average daily trip generation of 217 trips, with an a.m. peak hour of 16 trips and a p.m. peak hour of 22 trips. The trip generation is presented in Table 1.

Section 3.4 (Relation to Adjoining Areas) of the Subdivision Regulations reads in part "Proposed local residential streets shall be planned to discourage through traffic and to provide a safe and convenient system for present and prospective traffic in the area surrounding the proposed subdivision."

The proposed roadway layout is a cul-de-sac and therefore discourages cut through traffic. The proposed roadway is an extension of the existing Rock Hole Lane, and



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therefore we can assume that the commission has previously determined that this location provides a safe and convenient system for present and prospective traffic.

Section 3.6 (Street Classification and Improvements) of the Subdivision Regulations reads in part "Streets shall be planned in such a way as to provide a safe and convenient street system for present and future traffic and shall fit the topography of the land as much as possible. Proposed streets shall be in harmony with existing or proposed streets shown in the Plan of Development as described in Section 8-23 of the General Statutes, especially in regard to safe intersections with such streets, and so arranged and of such width, as to provide an adequate and convenient system for present and prospective traffic needs."

The proposed roadway is an extension of the existing Rock Hole Lane, and therefore we can assume that the commission has previously determined that this location provides a safe and convenient system for present and prospective traffic. A connection has not been made to the temporary cul-de-sac of Allston Road and there is a significant change on grade between the end of the cul-de-sac and the proposed Rock Hole Lane. A significant amount of fill would be required to make an interconnection. It was determined that this would not fit the topography of the land as much as possible.

Section 3.6.4 (Residential Access Street) of the Subdivision Regulations reads "A public street which provides for frontage and access to residential lots and carries no through traffic and only residential trips having a destination or origin on the street itself. Traffic volume should not exceed 250 vehicles per day." In addition, Section 3.6.18 (Street Design for New Subdivision Streets) indicates that a Residential Access Street requires 50 feet of right of way, a pavement width of 24 feet, a design speed of 25 mph, a minimum grade of 0.6%, a maximum grade of 10%, a minimum centerline radius of 200 feet, and a minimum sight distance of 200 feet. A cul-de-sac pavement width of 45 feet is required for a dead end street.

From the above ITE trip generation data it can be seen that the proposed subdivision has an average daily traffic volume of less than 250 trips. The proposed subdivision plans a proposed roadway that meets all of the design criteria listed in the Street Design Criteria for a Residential Access Street.

Section 3.6.16 (Cul-de-sac Street) of the Subdivision Regulations reads "Cul-de-sacs (streets closed at one end by building lots and which will not be extended in the future) shall not exceed 1600 feet in overall length. The length shall be measured from centerline intersection of two (2) streets to the center of the cul-de-sac. The maximum overall length of 1600 feet may be permitted when the estimated average daily traffic based on the land use density will not exceed 1000 vehicles per day."

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The proposed subdivision roadway is 1,317 feet in length and the proposed ADT is less than 250 trips per day. The proposed roadway therefore complies with this section of the regulations.

Section 3.11 (Sidewalks) of the Subdivision Regulations Reads "The Commission shall require sidewalks on all streets, in pedestrian easements and in other places deemed proper by the Commission. Sidewalks shall be provided on both sides of arterial and collector street, and on one side of local residential and residential access streets as directed by the Commission. Sidewalk construction shall conform to the Standard Specifications."

Since the existing subdivision into which the proposed subdivision is being connected to does not have sidewalks on any of the nine existing roadways, the applicant is requesting a waiver of this requirement. Since Rock Hole Lane is a low volume roadway, and there are no existing sidewalks to connect to, it is our professional opinion that a waiver should be granted.

Section 6.1.I (Application Requirements) of the Newington Subdivision Regulations reads "Subdivision developments in excess of fifty (50) lots shall be required to include as part of the application a traffic report identifying existing traffic patterns and roadway conditions, an analysis of the projected traffic generated by the proposed development, and proposed recommendations to correct any anticipated traffic safety hazards."

Since the proposed subdivision proposes fewer than 50 lots, a traffic impact report is not required.

Based on our review of the Subdivision regulations and the proposed subdivision plans and based on the projected average daily traffic volume of 217 trips, it is my professional opinion that from a traffic impact perspective, the submitted plans are in conformance with the applicable Subdivision Regulations.

We appreciate the opportunity to provide this analysis to you. We will be available to offer testimony in support of your application before local planning agencies upon your request. If you require additional information regarding this application, please do not hesitate to contact our office.

Very truly yours,

F. A. Hesketh & Associates, Inc.

Scott F. Hesketh, P.E.

Manager of Transportation Engineering

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Table 1 Trip Generation Rock Hole Brook Subdivision Newington, CT

Land Use	Size	ADT	A.M. Peak Hour			P.M. Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total
Single Family Detached	Avg Rates 23 Units	9.43 tr/unit 217	0. 4	70 trips/un 12	it 16	0.9 14	94 trips/ur 8	iit 22